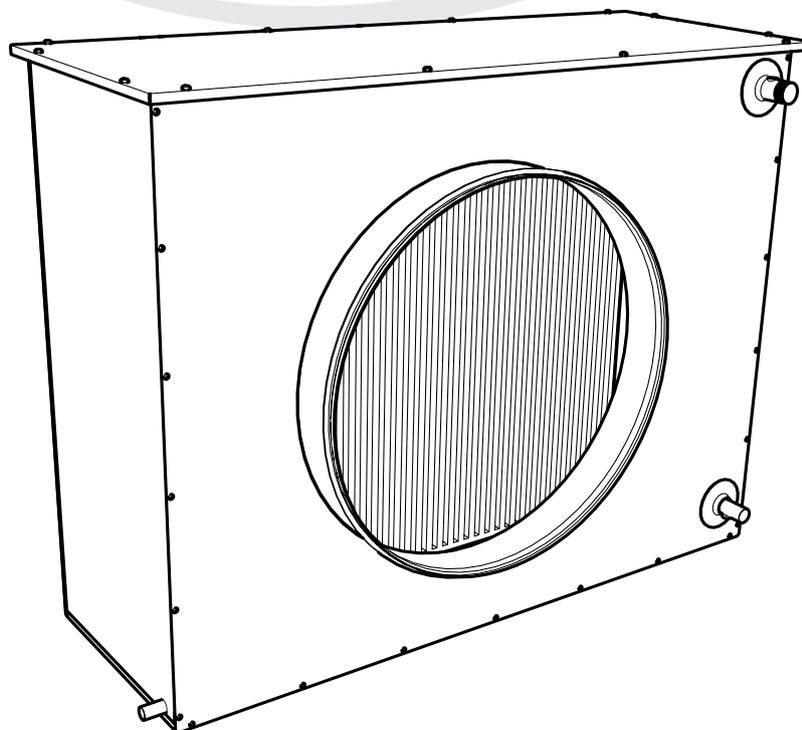


CIRCULAR DUCT WATER, FREON COOLERS

**AVA
AVA-DX**



Technical manual

Transportation and storage

Units are packed in the factory to comply needs of normal transportation handling. Use suitable lifting and moving equipment when handling units in order to prevent damages and injuries. Do not use cables, terminal boxes, and inlet-exhaust flanges for lifting and moving units. Avoid hits and shock loads. Units should be stored in dry rooms where relative humidity max. 70% (at +20°C), ambient temperature is within the range of +5°C to +40°C. Units should be protected from dust, dirt and water. Avoid long term storing. Longer than 1 year is not recommended.

Description

Cooling coils are used for air cooling in ventilation systems. The coil consists of copper tubes and aluminium fins. The casing is made of galvanized sheet steel. Easy to mount. Suitable for operation indoor environment.

The purpose of the unit is: cooling of clean air. The unit is used in clean air ventilation and conditioning systems.

Safety precautions

- Do not use the unit for purposes other than its' intended use.
- Do not disassemble or modify the unit in any way. Doing so may lead to mechanical failure or injury.
- Use special clothing and be careful while performing maintenance, and repair jobs - edges of the components' casings may be sharp and cutting.
- Do not place or operate unit on unsteady surfaces and mounting frames.
- Mount the unit firmly to ensure safe operating.
- Never use this unit in any explosive or aggressive elements containing environment.

Mounting

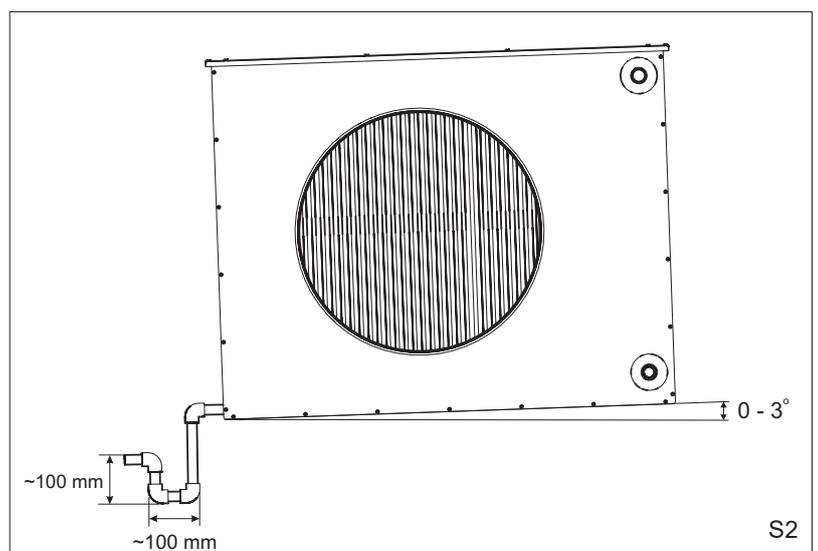
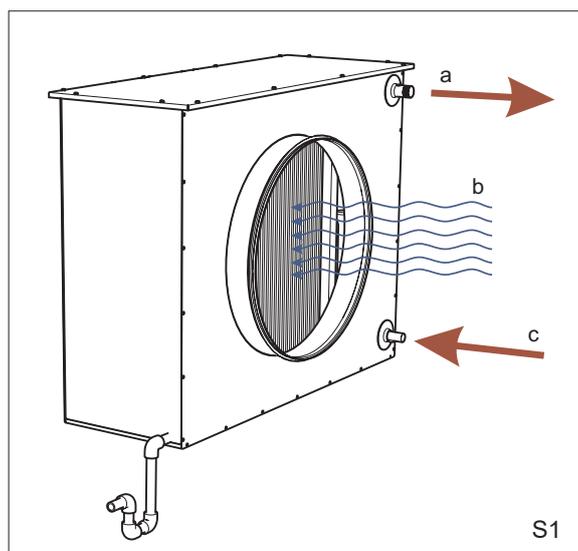
- Installing should only be performed by qualified and trained staff.
- Coils are designed for mounting in horizontal position.
- Water connection process should be processed using mounting scheme (see the scheme S1).

S1:

- a - water flow out;
- b - air flow;
- c - water flow in.

When cooler is already mounted the draining system has to be connected. In order to do that siphon must be screwed to the cooler draining exhaust. The draining system should be filled up with at least 0,5 l of water (siphon must be always filled with water). Check if water reaches sewerage system.

Installed heaters must be 0-3° slope angle (fig. S2).



Maintenance

Description

Duct coolers are used in ventilation systems, where we need cooled supplied air. Cold water transports the cooling. Casing is made of galvanized steel, heating element and connection tube are made of copper, edgers are made of aluminium.

Control

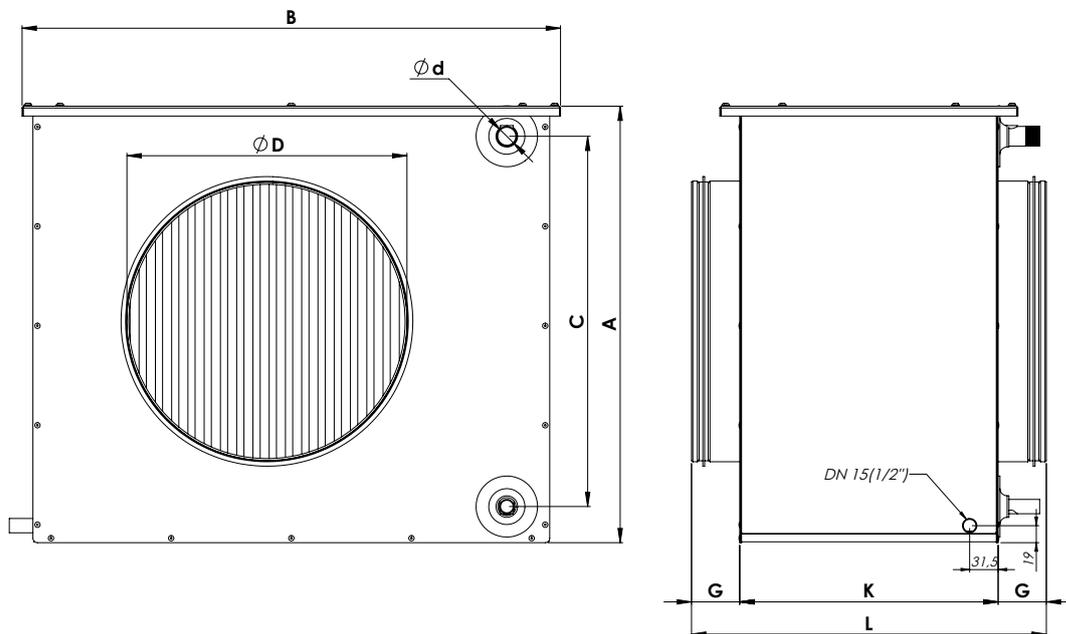
1. Check edges and their stability;
2. Check hermetics of water connection tubes;
3. Check if water circulation is working good. Sometimes check if there is no air in system;
4. The coil and ducts should be connected hermetically.

Cleaning

If cooler is soiled it should be cleaned.

1. Detach unit from ventilation and water supply systems.
2. Coil can be cleaned using tepid water and alkaline micture which does not generate corrosion on aluminium;
3. Test the pressure-tight of tubes with the help of compressed air.

Dimensions



	ϕD [mm]	ϕd [mm]	C [mm]	B [mm]	A [mm]	K [mm]	G [mm]	L [mm]	m [kg]
AVA 100	100	10	98	236	170	265	48	356	4,4
AVA 125	125	22	188	330	257	286	48	388	6,5
AVA 160	160	22	188	330	255	286	40	360	6,9
AVA 200	200	22	263	396	328	286	40	365	9,0
AVA 250	250	22	338	475	415	286	55	396	13,0
AVA 315	315	22	413	555	480	286	55	396	16,0
AVA 400	400	22	438	720	505	316	65	445	21,0
AVA 500	500	G1	610	946	737	317	74	465	38,2
AVA 630	630	G1	760	1096	887	317	74	465	50,6
AVA 710	710	G2	774	1146	967	446	74	594	78,8
AVA-DX 315	315	G1	413	596	487	286	54	394	18
AVA-DX 400	400	G1	438	746	512	316	74	464	22,9
AVA-DX 500	500	G1	610	946	737	317	74	465	34,9
AVA-DX 630	630	G1	760	1096	887	317	74	465	46,4
AVA-DX 710	710	G2	774	1146	967	446	74	594	77,9

Warranty

1. All equipment manufactured in our factory is checked in operating conditions and tested before delivery. Test protocol is supplied together with the unit. The equipment is shipped in good working order and condition to the direct client. The unit is warranted for the period of two years from the invoice date.
2. If equipment is found to have been damaged during transportation, a claim should be made against carrier, as we assume no responsibility for such damage.
3. This warranty does not apply:
 - 3.1. when transportation, storage, installation and maintenance instructions of the unit are violated;
 - 3.2. when the equipment is improperly maintained, mounted - inadequate maintenance;
 - 3.3. when the equipment without our knowledge and permission has been upgraded or unskilled repairs were made;
 - 3.4. when the unit was used not for its original purpose.
4. This warranty does not apply at these malfunction cases:
 - 4.1. mechanical damage;
 - 4.2. damage caused by entering outside objects, materials, liquids;
 - 4.3. damage caused by natural disaster, accident (voltage change in the electricity network, lightning, etc..).
5. The company assumes no liability for its products either directly or indirectly damage, if the damage is caused by failure to comply with installation and mounting regulations, deliberate or careless users or third-party behavior.

These conditions are readily discernable when the equipment is returned to our factory for inspection.

If the direct client determines that equipment is found to be faulty, or a breakdown occurred, he should inform the manufacturer within five working days and deliver the equipment to manufacturer. Delivery costs should be covered by customer.